

**Amendments to the Specification:**

Please amend the title to read as follows:

**POLYPEPTIDES HAVING BRAIN DISPOSITION BRAIN-LOCALIZING  
ACTIVITY AND UTILIZATION OF THE SAME USES THEREOF**

Please amend the specification as follows:

Please replace the paragraphs starting at page 8, line 11, with the following rewritten paragraphs:

In a preferred embodiment, the polypeptides of the present invention comprise the amino acid motif sequence of [Sequence 1], more preferably the amino acid motif sequence of [Sequence 2], or the amino acid motif sequence of [Sequence 3] described below. In other words, a preferred embodiment of the present invention provides polypeptides comprising at least any one of the amino acid motif sequences of [Sequence 1] to [Sequence 3] shown below.

[Sequence 1] X<sub>1</sub>-(R or K)-X<sub>3</sub>-X<sub>4</sub> or

X<sub>4</sub>-X<sub>3</sub>-(R or K)-X<sub>1</sub>,

wherein

X<sub>1</sub> denotes S (serine), T (threonine), N (asparagine), P (proline), V (valine), or L (leucine);

X<sub>3</sub> denotes an arbitrary amino acid; and

X<sub>4</sub> denotes G (glycine), S (serine), T (~~tyrosine threonine~~), C (cysteine), N (asparagine), L (leucine), Q (glutamine), or Y (tyrosine).

[Sequence 2] X<sub>1</sub>-(R or K)-X<sub>3</sub>-X<sub>4</sub> or

X<sub>4</sub>-X<sub>3</sub>-(R or K)-X<sub>1</sub>,

wherein

X<sub>1</sub> denotes S (serine), T (threonine), N (asparagine), P (proline), or V (valine), and is preferably S or T;

X<sub>3</sub> denotes an arbitrary amino acid; and

X<sub>4</sub> denotes G (glycine), S (serine), T (~~tyrosine threonine~~), C (cysteine), N (asparagine), Q (glutamine), or Y (tyrosine), and is more preferably T, Q, or C. In the above-mentioned (R or K), R is more preferable.

These amino acids (G, S, T, C, N, Q, and Y) are generally categorized into uncharged polar amino acids.

[Sequence 3] X<sub>1</sub>-(R or K)-X<sub>3</sub>-X<sub>4</sub> or

X<sub>4</sub>-X<sub>3</sub>-(R or K)-X<sub>1</sub>,

wherein

X<sub>1</sub> denotes S (serine), T (threonine), P (proline), or L (leucine);

X<sub>3</sub> denotes an arbitrary amino acid; and

X<sub>4</sub> denotes G (glycine), S (serine), T (~~tyrosine threonine~~), C (cysteine), L (leucine), or Q (glutamine).

Please replace paragraph starting at page 12, line 7, with the following rewritten paragraph:

Furthermore, the phrase "cerebrovascular endothelial cells" in the present invention can refer to cells such as mouse MBEC4, commercially available human cerebrovascular endothelial cell BBEC, ~~temporary cultured primary cultured~~ bovine cerebrovascular endothelial cells, or co-cultures of peripheral blood vessel-derived vascular endothelial cells and astrocytes prepared for inducing a BBB-like function.

Please replace paragraph starting at page 13, line 9, with the following rewritten paragraph:

Furthermore, polynucleotides encoding the polypeptides of the present invention are also comprised in this invention. The polynucleotides generally include both DNAs and RNAs. More specifically, DNAs encoding the polynucleotides polypeptides of the present invention, and RNAs that are transcription products of these DNAs are encompassed in the present invention.

Please replace paragraph starting at page 28, line 16, with the following rewritten paragraph:

250  $\mu$ L of the overnight ER2738 culture and 3  $\mu$ L of IPTG (Katayama)/X-gel X-gal (Nacalai) mixture (50  $\mu$ g/ml IPTG; 40  $\mu$ g/ml X-gel X-gal) were added to a 14-ml snap cap tube (Falcon), and 2.5 ml of dissolved Top Agarose (6  $\mu$ g/ml Agarose in LB medium) was added to this and mixed. The mixture was immediately spread on LB/IPTG/X-gel X-gal plates to produce ER2378 laund round plates. A series of dilutions of the phage solution was prepared in TBS for titration. 10  $\mu$ L of each dilution was blotted onto an ER2378 laund round plate, dried until the solution was no longer flowing, and cultured overnight at 37°C. The titer of the phage solution was calculated by counting the blue colored plaques.

Please replace paragraph starting at page 33, line 26, with the following rewritten paragraph:

To 14-ml snap cap tubes, 250  $\mu$ L of the overnight culture of BL21 or BLT5403 was added, and 2.5 ml of dissolved Top Agarose (6  $\mu$ g/ml Agarose in LB broth) was added and mixed. This was immediately spread on LB plates to produce a BL21 laund round plate and a BLT5403 laund round plate. Using SM buffer, a series of dilutions of the phage solution

whose titer is to be measured were prepared, and these solutions were blotted in 10 µL aliquots on the BL21 ~~laund~~ round plates and BLT5403 ~~laund~~ round plates, dried until the solutions were no longer flowing, and then cultured for 2 to 4 hours at 37°C. The titers of the phage solutions were calculated by counting the number of plaques formed. Phages that have a portion of the cDNA of rRNA (5'-CAC CAA GCG TTG GAT TGT TCA CCC ACT AAT AGG GAA CGT GAG CTG GGT TTA GAC CGT CGT GAG ACA GGT TAG TTT TAC CCT ACT GAT GAT GTG TTG TTG CCA TGG TAA TCC TGC TCA GTA CGA GAG GAA CCG CAG GTT CAG ACA TTT GGT GTA TGT GCT TGG CTG AGG AGC CAA TGG GGC GAA GCT ACC ATC TGT GGG ATT ATG ACT GAA CGC CTC TAA GTC AGA ATC CCG CCC AG-3'/SEQ ID NO: 20) incorporated into the T7 rRNA: T7 Select 1-1 kit (NEB, 70010-3), which was used as an internal standard in “3. *In vivo* panning” of the aforementioned Example 2, could not grow in BL21, and formed plaques only when BLT5403 was used as the host.